Care and treatment of people with dementia

quality of life and quality of care in dementia

the most important (and the most exciting) health and social care challenge this century

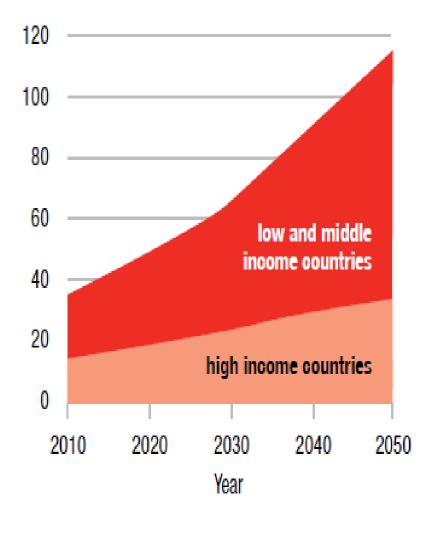
**Sube Banerjee** 

Professor of Mental Heath and Ageing, The Institute of Psychiatry, King's College London

## WHY BOTHER WITH DEMENTIA?

### Growth of numbers of people with dementia

Numbers of people with dementia (millions)



- The World Alzheimer Report (2009) estimated:
  - 35.6 million people living with dementia worldwide in 2010
  - Increasing to 65.7 million by 2030
  - 115.4 million by 2050

### Future projections

The number of people in the UK with dementia will double in the next 40 years.

n = 10,000 people



800,000 people with dementia in 2012

1,000,000 people with dementia in 2021

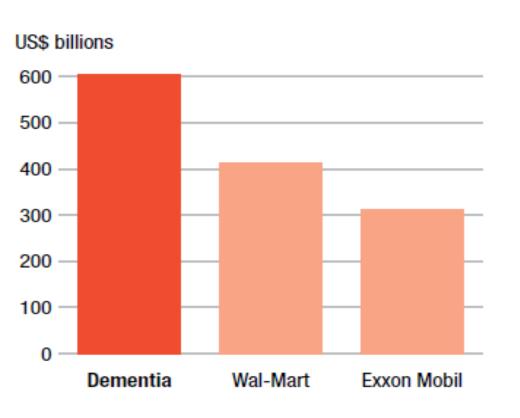
1,700,000 people with dementia in

2051

Alzheimer's Society, March, 2012

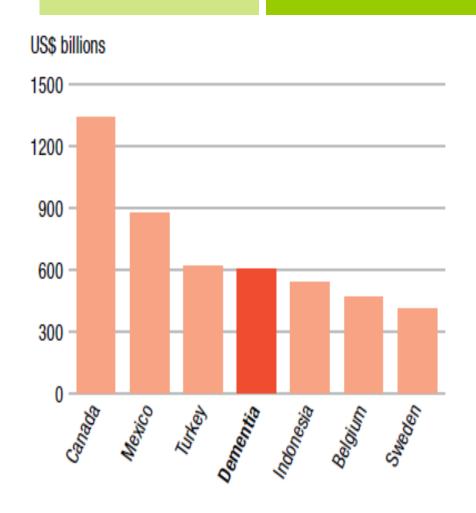
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#### Worldwide cost of dementia



- The societal cost of dementia is already enormous.
- Dementia is already significantly affecting every health and social care system in the world.
- The economic impact on families is insufficiently appreciated.
- The total estimated worldwide costs of dementia are US\$604 billion in 2010.
- These costs are around 1% of the world's GDP
  - 0.24% in low income
  - 1.24% in high income

#### Worldwide costs of dementia



 The World Alzheimer Report (2010) estimated that:

If dementia care were a country, it would be the world's 18th largest economy

## **Problems and solutions to problems**

## **National dementia strategies**

- France
- Wales
- Scotland
- Australia
- Germany
- Japan
- South Korea
- India
- England



# Theme 1. Improving public and professional awareness and understanding

## Sometimes what we know is wrong



According to a recent Nationwide survey:

# More Doctors smoke Camels than any other cigarette

DOCTORS in every branch of medicine—113,997 in all—were queried in this nationwide ready of cigarette preference. Three leading research organizations made the survey. The gist of the query was—What cigarette do you smoke, Doctor?

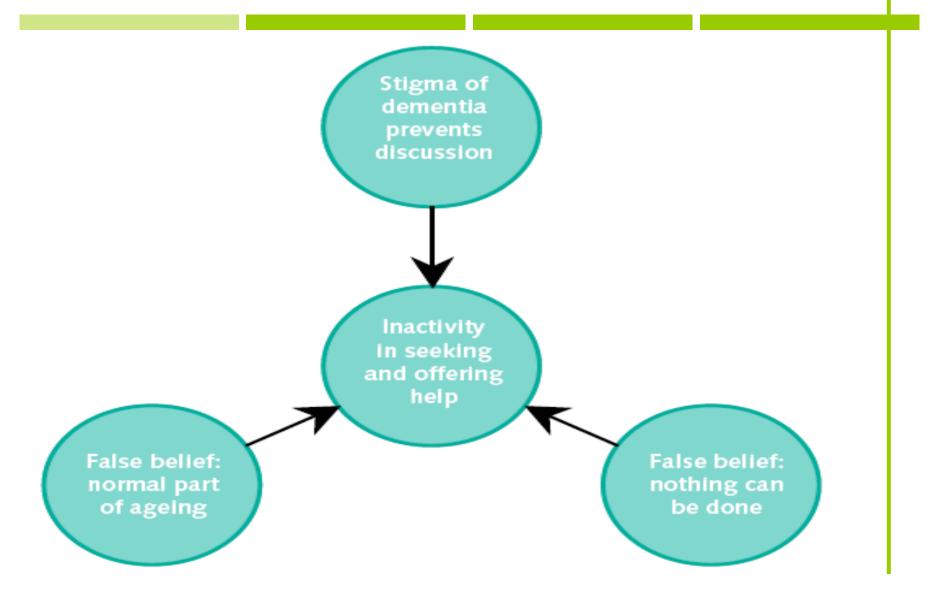
The loand named most true Come!

The rich, full flavor and cool mildness of Camel's superb blend of coeffier tobaccos seem to have the same appeal to the smoking tastes of doctors as to millions of other smokers. If you are a Camel smoker, this preference among doctors will hardly surprise you. If you're not—well, try Camels new.

CAMELS Costlier Tobaccos



# Dismantling the barriers to care: public and professional attitudes and understanding



### Health promotion, education

## **Worried** someone close to you is losi 1g the'r me ror

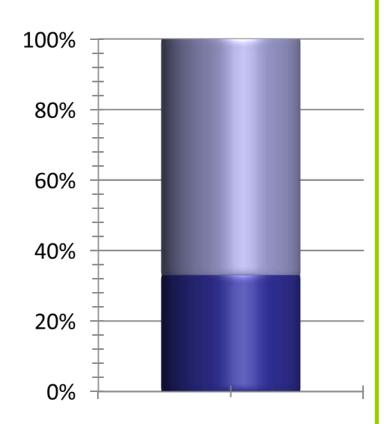
Many people suffer from memory loss as they get older. But if it starts to happen on a regular basis, it could be the early signs of dementia.

If you're worried, see your doctor

Theme 2. Good-quality early diagnosis and intervention for all

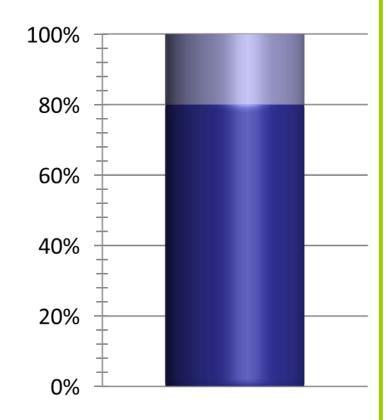
### The fundamental problem - now

- Only a third at most of people with dementia receive any specialist health care assessment or diagnosis
- When they do, it is:
  - Late in the illness
  - Too late to enable choice
  - At a time of crisis
  - Too late to prevent harm and crises



#### The solution

- 80% of people with dementia receive specialist health care assessment or diagnosis
- When they do, it is:
  - Early in the illness
  - Early enough to enable choice
  - In time to prevent harm
  - In time to prevent crises



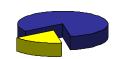
## Services for early diagnosis and intervention in dementia for all – markers of quality

- Working for the whole population of people with dementia
  - ie has the capacity to see all new cases of dementia in their population
- Working in a way that is complementary to existing services
  - About doing work that is not being done by anybody
- Service content
  - Make diagnosis well
  - Break diagnosis well
  - Provide immediate support and care immediately from diagnosis

95% acceptance rate



18% minority ethnic groups



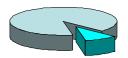
self-rated quality of life

baseline

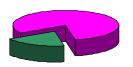
Improvement in



94% appropriate referrals

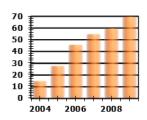


19% under 65 years of age





Proportion of new cases diagnosed

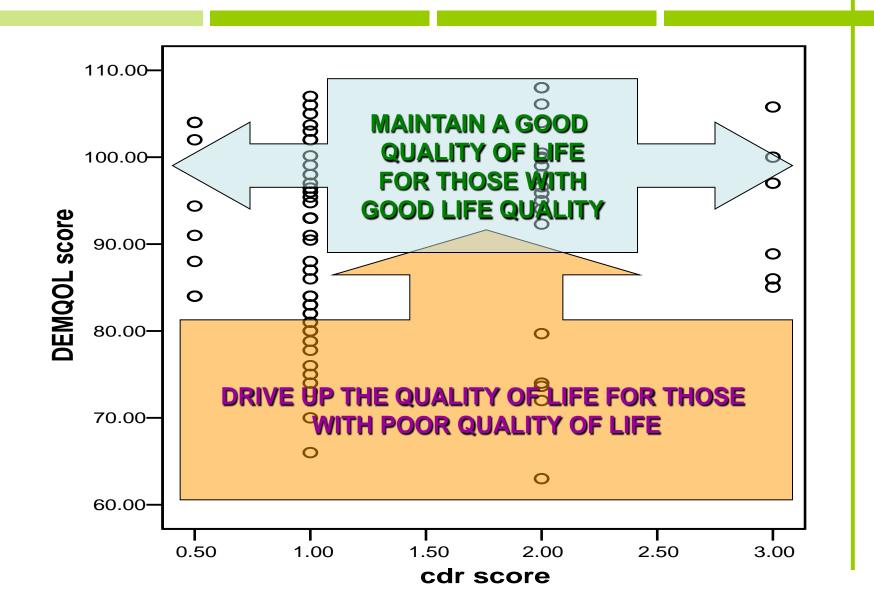


Banerjee et al 2007, IJGP

## World Alzheimer Report 2011: Nine reasons for early identification and treatment of dementia

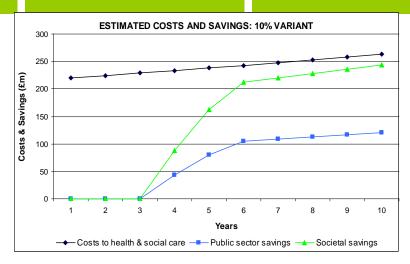
- 1. Optimising current medical management
- 2. Relief gained from better understanding of symptoms
- 3. Maximising decision-making autonomy
- 4. Access to services
- 5. Risk reduction
- 6. Planning for the future
- 7. Improving clinical outcomes
- 8. Avoiding or reducing future costs
- 9. Diagnosis as a human right

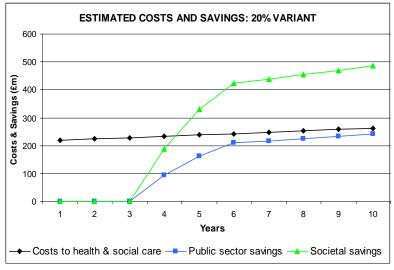
#### **Our goal**



## Early intervention for dementia is clinically and cost effective – "spend to save"

- 215,000 people with dementia in care homes -- £400 per week
- Spend on dementia in care homes pa
   £7 billion pa
- 22% decrease in care home use with early community based care
- 28% decrease in care home use with carer support (median 558 days less)
- Quality older people want to stay at home, higher qol at home
- Take an additional 220 million pa
- Delayed benefit by 5-10 years
  - Strategic head needed
- Model published by DH
- 20% releases £250 million pa y6





#### **Cost effectiveness**

Ine Net Present value would be positive if benefits (improved quality of life), rose linearly from nil in the first year to £250 million in the tenth year. This would be a gain of around 6,250 QALYs in the tenth year, where a QALY is valued at only £2500 per 12,500 per per not English - economics. By the tenth year of the service all 60 people in England then alive with dementia will have had the chance to be seen by the new services. A gain of 6,250 QALYS per year around 0.01 QALYs per person year. A gain of 12,500 QALYS around 0.02 QALYS per person year. A gain of 12,500 QALYS around 0.02 QALYS per person year. Eikely to be achievable in view of the rise of 4% reported from CMS.

- Needs only:-
  - a modest increase in average quality of life of people with dementia,
  - plus a 10% diversion of people with dementia from residential care, to be cost-effective.
- The net increase in public expenditure would then, be justified by the expected benefits.

  Banerjee and Wittenberg (2009) IJGP

Theme 3. Improved quality of care from diagnosis to the end of life

#### Theme 3 - Improving quality of care

- O6. Improved community personal support services
  - generic and specialist collation of data
- O7. Implementing the Carers' Strategy for people with dementia
  - make it work for dementia
- O8. Improved quality of care for dementia in general hospitals
  - clinical leads for dementia, specialist liaison teams collation of data
- O9. Improved intermediate care for people with dementia
  - change in guidance
- O10. Housing support, related services and telecare
  - watching brief
- O11. Living well with dementia in care homes
  - including review of use of antipsychotic medication in dementia
- O12. Improved end of life care for people with dementia
  - making it work for dementia



### The acute end of the dementia pathway

- 70% hospital beds occupied by older people, half of them have dementia Audit commission, 2006, Living Well in Later Life.
- Between 2000-2010, hospital stay for 60-74 increased by 50%, over 75 by 66%. Hospital Episode Statistics, 09-10.
- Dementia is a predictor of increased LOS, poorer outcomes and institutionalisation
- National Audit Office estimated excess costs of dementia to be £6 million/year in an average general hospital National Audit Office, 2007
- 30% of elderly patients who are admitted into acute hospitals from their own homes are discharged into care homes

## Evaluation RAID model – old age psychiatric liaison services in a general hospital

Saving 12m - 12,951 bed days 35 beds per day - £3m pa

8% increase admission prevention

6 beds per day

**Discharge home** 

**Before 34% - after 67%** 

**Readmission rates** 

**Before 19% - after 5%** 



Increasing rates of discharge at MAU

A&E diversion

More home discharges

Reducing rates of re-admissions

Total savings: £3.55 million to NHS

Money value Cost:return = £1:£4

At least 44 beds/day

£60,000/week to social care cost

# Drug management of behavioural and psychological symptoms in dementia

#### **Treatments**

Anti-dementia drugs
Cholinesterase inhibitors
i.e.Donepezil, Rivastigmine,
Galantamine

Glutamatergic drugs i.e Memantine

#### **Antidepressants**

#### **Antipsychotics**

Behavioural techniques Memory retraining
ABC approach

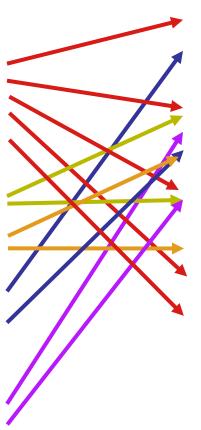
Novel interventions
Bright light therapy
Aromatherapy
Exercise



Memory loss, executive dysfunction, aphasia Behavioural problems e.g. agitation

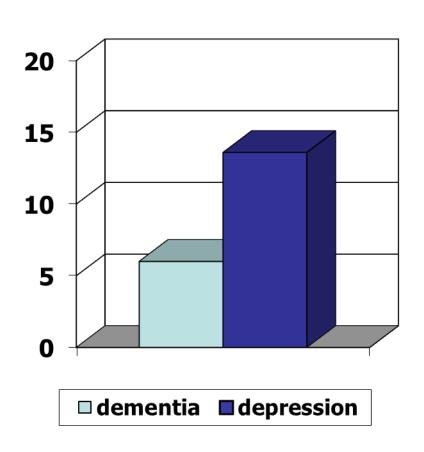
**Depression** 

Psychosis
eg delusions, hallucinations
Activities of daily living



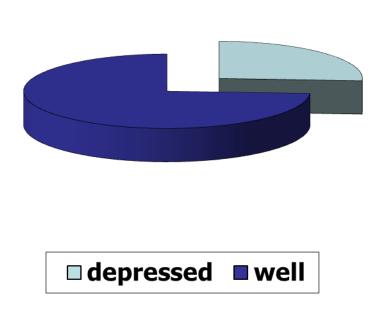
## **Depression in dementia**

## **Epidemiology**



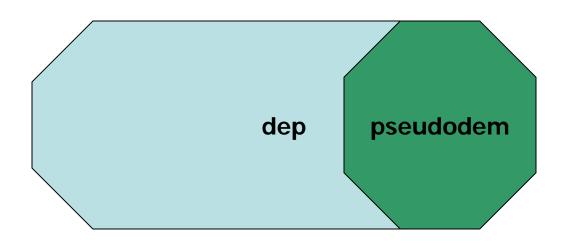
- Both common in later life
  - 6% dementia
  - 14% depression
- Assorted randomly expect 1% comorbidity

## **Epidemiology II**



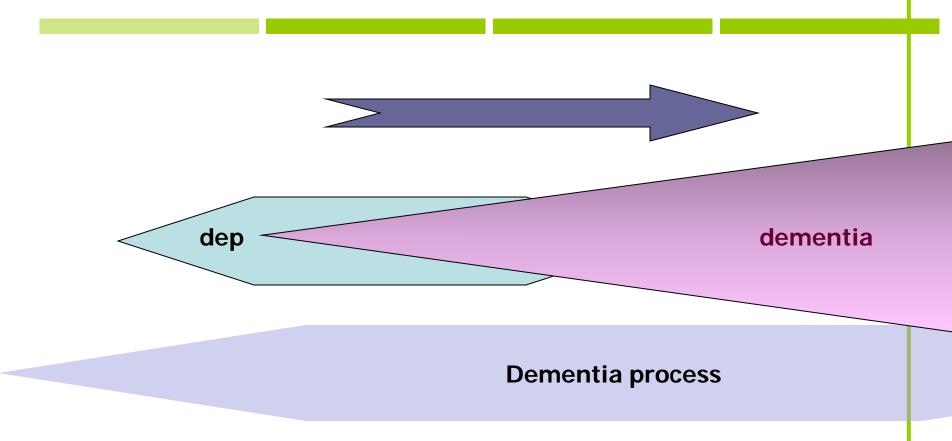
- Prevalence: 0-86% of people with dementia depressed
- Incidence: 12% per year (Steinberg et al, J Neuropsych 2003)
- Depends on:
  - Study group
  - Diagnostic criteria for depression
- Unstable and poor estimates for clinical practice

# Relationship between depression and dementia – pseudodementia



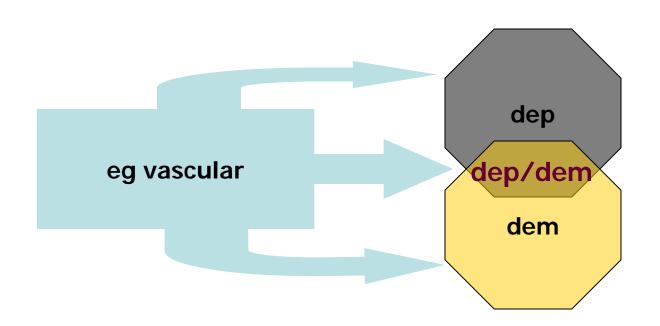
### Relationship between depression and dementia

- prodrome or early sign



- Biological
- Environmental

## Relationship between depression and dementia – common causation



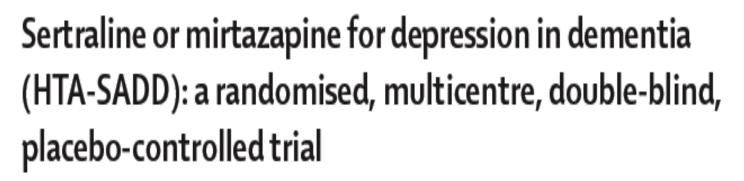
### **Evidence base for antidepressant treatment**

- Petracca et al (1996)
  - Clomipramine in 24 individuals
  - balanced

- Reifler et al (1989)
  - Imipramine in 61 individuals
  - negative

- Lyketsos et al (2003)
   DIADS
  - Sertraline in 44 individuals
  - positive

- Rosenberg et al (2010)
   DIADS II
  - Sertraline in 131 individuals
  - negative





Sube Banerjee, Jennifer Hellier, Michael Dewey, Renee Romeo, Clive Ballard, Robert Baldwin, Peter Bentham, Chris Fox, Clive Holmes,
Cornelius Katona, Martin Knapp, Claire Lawton, James Lindesay, Gill Livingston, Niall McCrae, Esme Moniz-Cook, Joanna Murray, Shirley Nurock,
Martin Orrell, John O'Brien, Michaela Poppe, Alan Thomas, Rebecca Walwyn, Kenneth Wilson, Alistair Burns

#### Summary

Background Depression is common in dementia but the evidence base for appropriate drug treatment is sparse and equivocal. We aimed to assess efficacy and safety of two of the most commonly prescribed drugs, sertraline and mirtazapine, compared with placebo.

Lancet 2011; 378: 403-11
Published Online
July 18, 2011

As close to realities of service provision as possible

Give an authoritative answer

A definitive multi-centre pragmatic randomised controlled trial of the clinical d cost effe of mirtazapine and sertraline versus treatment of depression in demen secondary care

9 sites

Manchester. North London

**Cornell Scale for Depression in Dementia** (CSDD)

Client Services Receip Inventory (CSRI)

**Defined pragmatically** 

## CSDD scores by treatment group, unadjusted means with 95% CI (a lower CSDD score means less depressive symptoms)

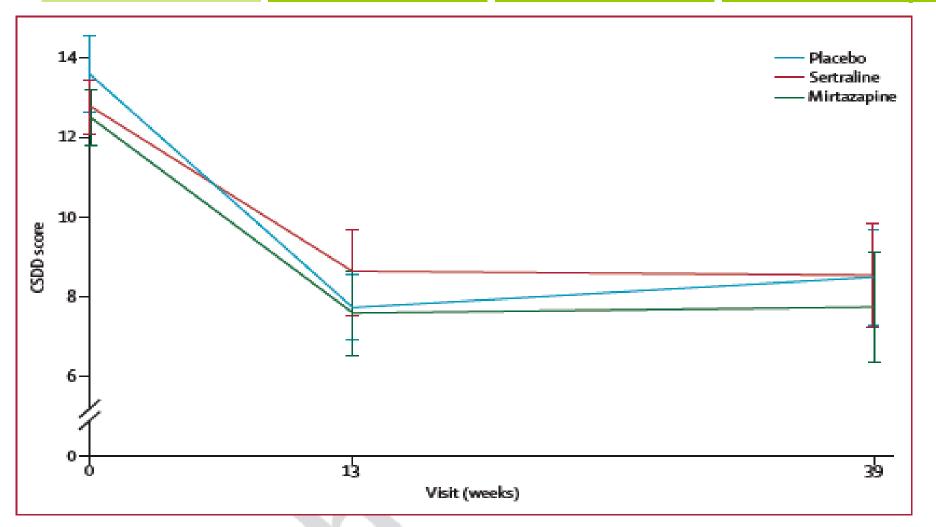


Figure 2: Unadjusted mean CSDD scores by treatment group

Lowest score is best. Error bars show 95% Cls. CSDD=Cornell scale for depression in dementia.

#### **Clinical conclusions**

- Referral to specialist services is helpful for people with depression in dementia
- Antidepressants should not a first line treatment
- Most cases will resolve with usual care and without sertraline or mirtazapine
- The drugs have harms

Benefits plateau at 13
 weeks so 3 months
 'watchful waiting' with
 psychological, social and
 educational treatment as
 usual is advocated

### What works?

#### **HTA-SADD Trial**

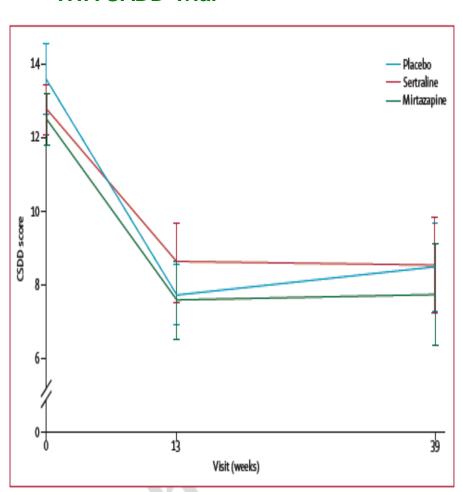
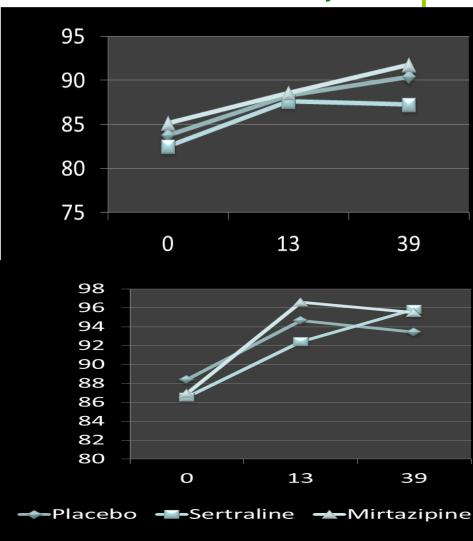


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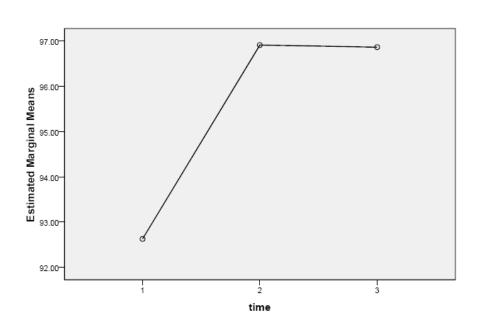
Lowest score is best. Error bars show 95% Cls. CSDD=Cornell scale for depression in dementia.

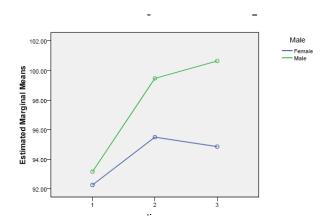
### **DEMQOL and DEMQOL-Proxy Score**

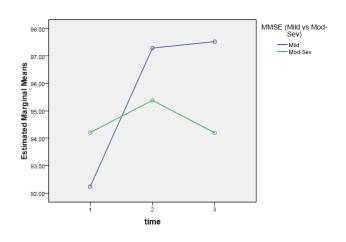


# What works? The intervention of teams in complex clinical situations

- routine practice
- data from patients remaining in service
- baseline, 6 months and 12 months
- indication of the possibility of change

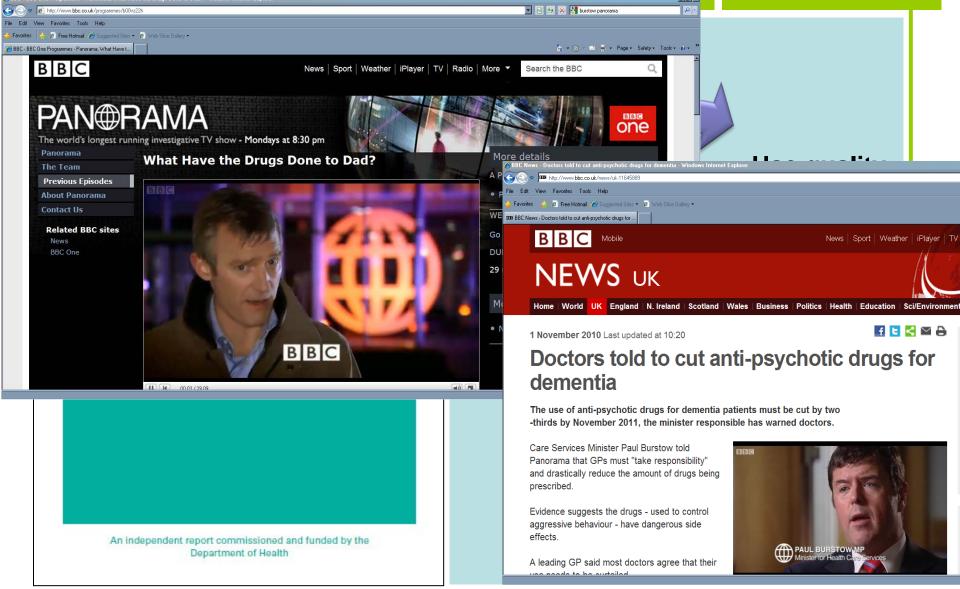






Reduced use of antipsychotic medication

Ministerial review of use of antipsychotics in dementia – simple actionable messages from research



# What's the use of antidepressants and antipsychotics in dementia?

- Depression and psychosis are different in dementia
- Psychopharmacology is different in dementia

- Need to be very careful in generalising findings from non-demented populations to people with dementia
  - Effects
  - Harms
- Need to understand better and to harness the power of good quality case management for dementia where there are complicated needs

### The need for action

"No other force is likely to shape the future of national economic health, public finances and national policies as the irreversible rate at which the world's population is growing older..."

S&P numbers take the debt from about 4.7% of GDP now to about 7.5% in the next decade



### Global Credit Portal RatingsDirect<sup>®</sup>

October 7, 2010

#### Global Aging 2010: An Irreversible Truth

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A Global Challenge

# Solidarity for people with dementia, their carers and society

Vision

System change

Ambition in scale

Investment

Commitment over time

Leadership

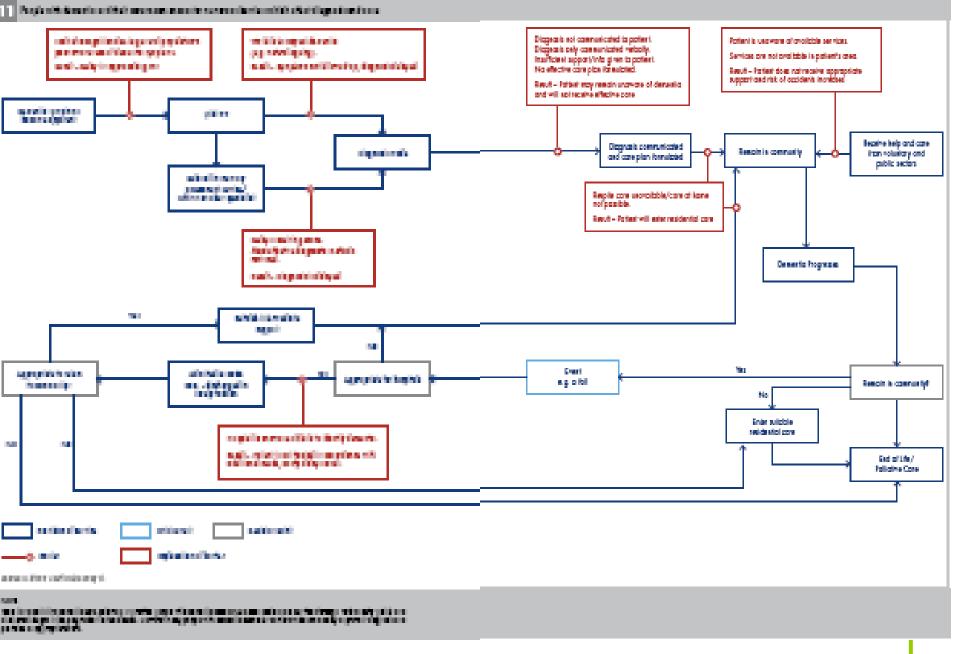
Services for early diagnosis and intervention in dementia for all – research based markers of quality



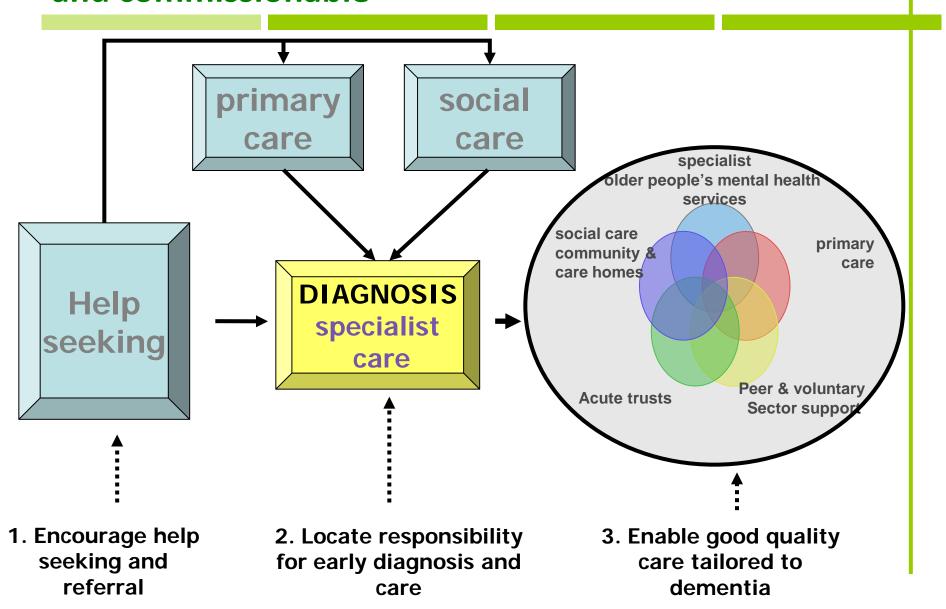
## Why bother about dementia?

"So I am determined that we will go further and faster on dementia – making life better for people with dementia and their carers, and supporting the research that will ultimately help us slow, stop and even prevent the condition"





# Dementia care pathway – simple, navigable and commissionable





Thank you and good luck!